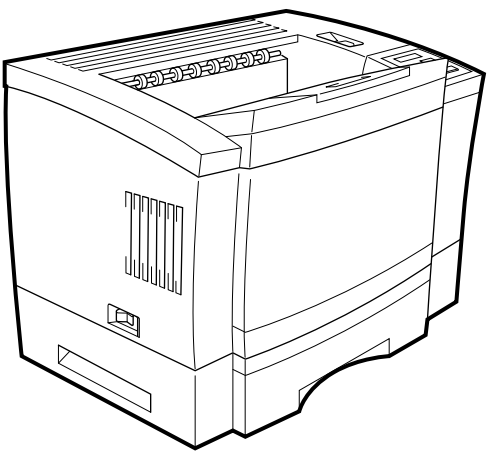
MINOLTA

Printer Driver

PageWorks/Pro 20

USER'S MANUAL



for Microsoft® Windows NT® 4.0

Welcome

This Printer Driver User's Manual describes how to install the Minolta PageWorks/Pro 20 Printer Utility. Before reading this Printer Driver User's Manual, we recommend that you read the User's Manual. It explains how to set up and operate the printer.

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into other languages without the express written prior consent from Minolta Co., Ltd.
The contents of this manual are subject to change without notice.

Trademark Acknowledgements

Microsoft and Windows NT are registered trademarks of Microsoft Corporation in the United States and/or other countries.
IBM is a registered trademark of International Business Machines Corporation.
PageWorks is a trademark of Minolta in the U.S. and Canada.
PagePro is a trademark of Minolta in Europe, Japan and Asia.
All other products or name brands are trademarks or registered trademarks of their respective holders.

Customer Support (U.S.A. Only)

Customer support for all Minolta PageWorks printer products is available 24 hours a day, seven days a week by calling **1-800-459-3250** (from within North America). Minolta also maintains a web site which provides printer driver downloads, Frequently Asked Questions and handles all e-mail requests for technical assistance at **www.minoltaprinters.com.**

Please be prepared to provide the following information when contacting Minolta Customer Support:

- Model Name
- Serial number
- A detailed description of the problem
- Any message displayed on the LCD panel

For questions or problems with installation, please be prepared to provide the following additional information:

- Brand name and model number of the computer
- Type of processor
- Type of operating system
- Amount of installed RAM

CONTENTS

Chapter 1: Installing the Printer Driver

Introduction.....1-1

System Requirements.....1-1

Installing the Printer Driver Under Windows NT4.0.....1-2

Installation: Direct Connection to a Network Port (LPR).....1-8

Installation: Printer Access through a Network Print Server.....1-14

Chapter 2: Using the Printer Driver

Printer Software Overview.....2-1

Displaying the PageWorks/Pro 20 Printer Driver Window.....2-1

Exiting the PageWorks/Pro 20 Printer Driver.....2-2

Choosing Menu Settings.....2-2

Common Button Operations.....2-2

Software Settings.....2-3

Page Layout.....2-3

Paper.....2-8

Quality.....2-11

Image.....2-15

Device Option.....2-16

About.....2-18

MEMO

Chapter 1

Installing the Printer Driver

Introduction

The Minolta PageWorks/Pro 20 printer utility was developed especially to provide true Windows based printing for users of the Minolta PageWorks/Pro 20 printer.

System Requirements

The following list contains the system requirements necessary for optimal operation of the Minolta PageWorks/Pro 20 Printer Driver.

Operating system: Microsoft Windows NT Workstation 4.0

Personal computer: IBM-compatible PC (CPU: Intel processor)

I/O interface: Standard PC parallel printer port and cable.

Memory: At least 16MB PC RAM.

Free hard disk space: At least 8MB for files.

Disk drive: One, CD-ROM drive is required for installation.

Display: VGA (640 × 480-dot) or higher resolution.

Note

- Use of a poor quality parallel cable may adversely affect printing.

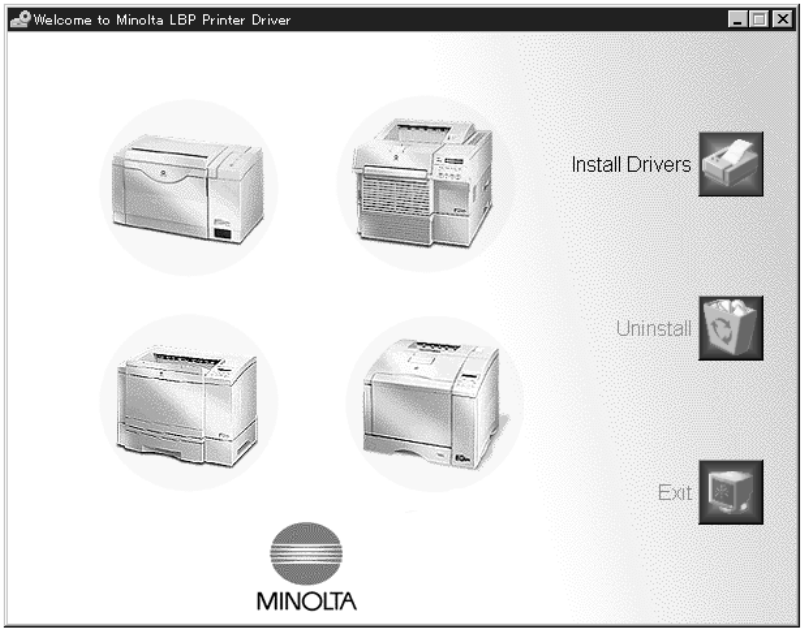
Installing the Printer Driver Under Windows NT4.0

This section provides information on installing the Printer Driver on a computer running Windows NT4.0.

1 Turn on your printer.

2 Turn on your computer and start up Windows NT4.0

3 Insert the CD-ROM titled **Minolta LBP Printer Driver** into the CD-ROM driver of the computer.
The Welcome screen will appear over the desktop on your monitor.



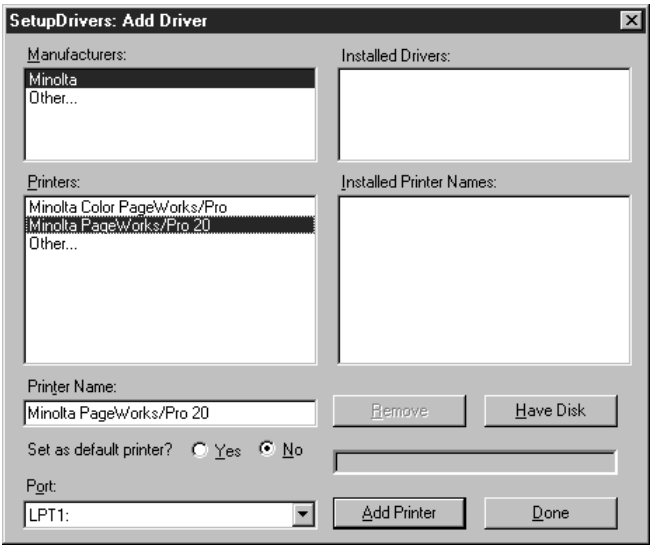
Note

- Depending upon the configured settings of your computer, the Welcome screen may not automatically appear on your monitor. If the Welcome screen does not appear, double-click the CD icon. When the **Minolta LBP Printer Driver** window appears, click on the **Setup** icon. The Welcome screen will appear on your monitor.

4 Click on the **Install Drivers** icon of the Welcome screen.

The **SetupDrivers: Add Driver** window appears.

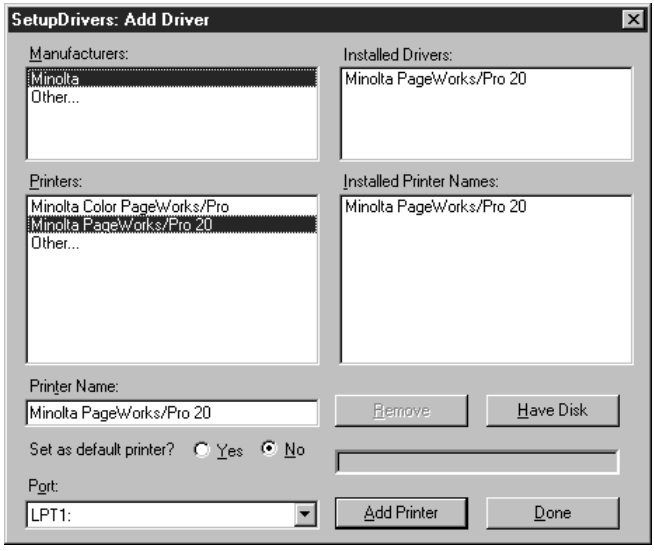
5 Make sure that **Minolta** is selected in the **Manufacturers** window. If **Minolta** is not selected in the **Manufacturers** window, please select it now.



6 Make sure that **Minolta PageWorks/Pro 20** is selected in the **Printers** window. If **Minolta PageWorks/Pro 20** is not selected in the **Printers** window, select it now.

7 Click on the **Add Printer** icon.

- Make sure that **Minolta PageWorks/Pro 20** appears in the **Installed Drivers** window.
- Make sure that **Minolta PageWorks/Pro 20** appears in the **Installed Printer Names** window.



8 Click the **Done** icon.
The Welcome screen will appear on your monitor.

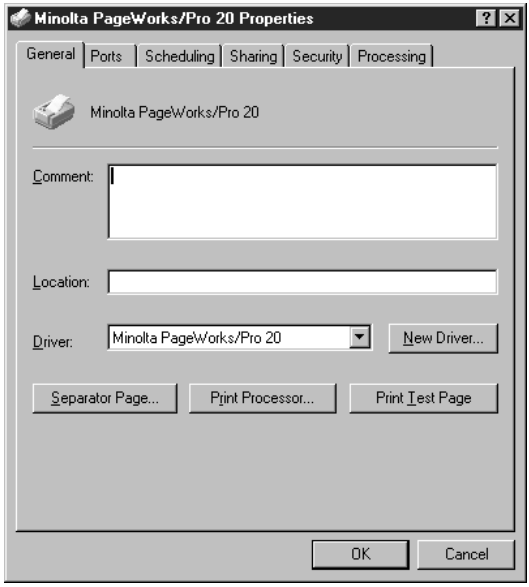
9 Close the Welcome screen.

10 Click the **Start** button, point to **Settings** and then click **Printers**.

11 Make sure that the **Minolta PageWorks/Pro 20** icon has been added to the **Printers** window.

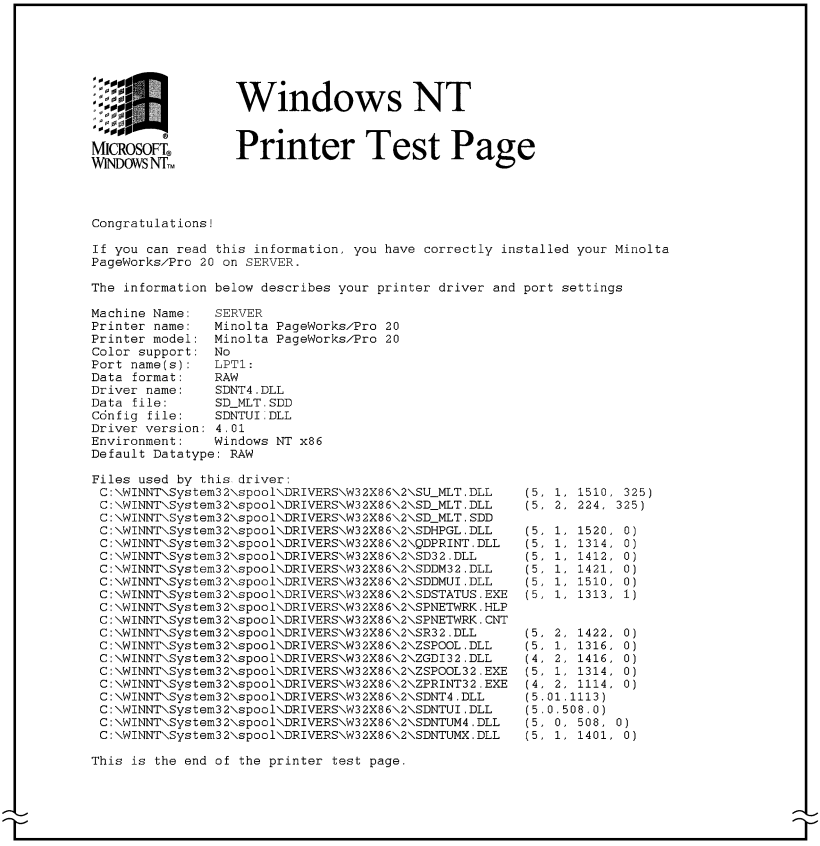
12 • Click **Minolta PageWorks/Pro 20** to highlight it, and then select **Properties** from the **File** menu.

• Click the **Print Test Page** button.



Print Test Page: example

The sample below represents the test page that will print. Make sure that “Minolta PageWorks/Pro 20” appears on the test page as the printer model. This confirms that the printer software has been correctly installed.



Windows NT
Printer Test Page

Congratulations!

If you can read this information, you have correctly installed your Minolta PageWorks/Pro 20 on SERVER.

The information below describes your printer driver and port settings

```
Machine Name:    SERVER
Printer name:    Minolta PageWorks/Pro 20
Printer model:   Minolta PageWorks/Pro 20
Color support:   No
Port name(s):    LPT1:
Data format:     RAW
Driver name:     SDNT4.DLL
Data file:       SD_MLT.SDD
Config file:     SDNTUI.DLL
Driver version:  4.01
Environment:     Windows NT x86
Default Datatype: RAW

Files used by this driver:
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SU_MLT.DLL     (5, 1, 1510, 325)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SD_MLT.DLL     (5, 2, 224, 325)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SD_MLT.SDD
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDHPGL.DLL     (5, 1, 1520, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\QDPRINT.DLL    (5, 1, 1314, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SD32.DLL       (5, 1, 1412, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDDM32.DLL     (5, 1, 1421, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDDMUI.DLL     (5, 1, 1510, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDSTATUS.EXE   (5, 1, 1313, 1)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SPNETWRK.HLP
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SPNETWRK.CNT
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SR32.DLL       (5, 2, 1422, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\ZSPOOL.DLL     (5, 1, 1316, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\ZGDI32.DLL     (4, 2, 1416, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\ZSPOOL32.EXE   (5, 1, 1314, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\ZPRINT32.EXE   (4, 2, 1114, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDNT4.DLL      (5.01.1113)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDNTUI.DLL     (5.0.508.0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDNTUM4.DLL    (5, 0, 508, 0)
 C:\WINNT\System32\spool\DRIVERS\W32X86\2\SDNTUMX.DLL    (5, 1, 1401, 0)

This is the end of the printer test page.
```

Installation: Direct Connection to a Network Port (LPR)

The following section describes the procedure for installing the **Minolta PageWorks/Pro 20 Printer Driver** when the printer has an optional network interface card and is directly connected to the computer through a local area network (LAN).

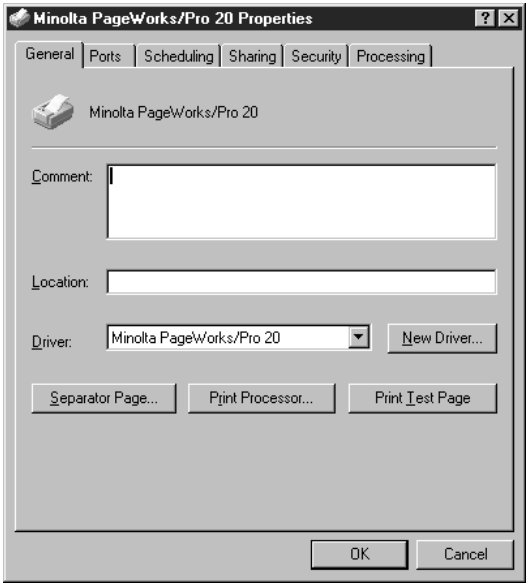
Notes

- Refer to the documentation that came with your printer's optional network interface card when installing the software.
- If you are using the optional network card with a printer and computer that are connected through a network server, please install the software according to the procedure titled **Installation: Printer Access through a Network Print Server** on page 1-14.

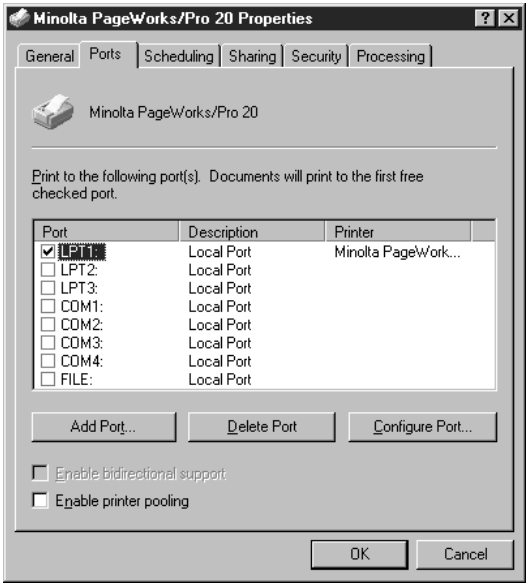
1 Continue with the following steps from the basic installation procedure started under **Installing the Printer Driver Under Windows NT4.0** on page 1-2.

2 Click the **Minolta PageWorks/Pro 20** icon. Open the **File** menu and select **Properties**. This item will open the **Minolta PageWorks/Pro 20 Properties** window.

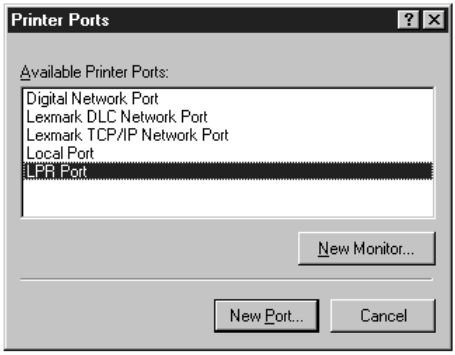
3 From the **Minolta PageWorks/Pro 20 Properties** window, click on the **Ports** tab to open the **Ports** window.



4 Click the **Add Port** button to open the **Printer Ports** window.



5 From the **Printer Ports** window, select **LPR Port** and click the **New Port** button.

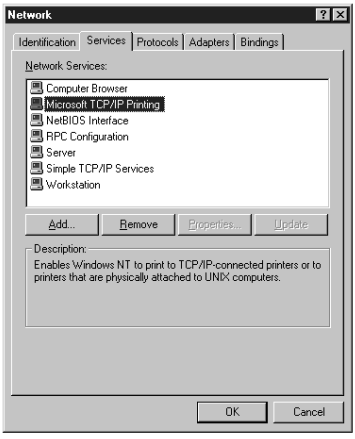


Note

- The **LPR Port** item cannot be selected unless the following two settings have been enabled in the **Control Panel Network** applet:

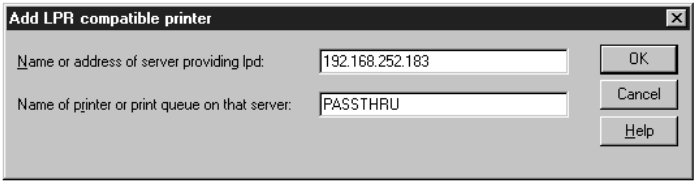
Protocol: TCP/IP Protocol

Services: TCP/IP Printing



6 • In **Name or address of server providing lpd**, type the printer IP address that was assigned when the network interface card was installed. The IP address shown below is an example only.

• In **Name of printer or print queue on that server**, enter PASSTHRU.



Notes

- Be sure to check with the network administrator for the IP address that you need to use.
- Proper printing requires that you do not enter anything other than **PASSTHRU** as the **Name of printer or print queue on that server**.

7 Click the **OK** button to complete the procedure.

Installation: Printer Access through a Network Print Server

The following describes the installation procedure for the **Minolta PageWorks/Pro 20 Printer Driver** when the printer is equipped with an optional network interface card and both the printer and computer are connected to a network print server through a local area network (LAN). This type of installation will enable the printer driver to be downloaded to various clients from the network print server.

Please refer to the following instructions when installing the printer driver from a network print server.

Notes

- For details regarding the driver settings, be sure to contact your system administrator.
- It is necessary to install the **Minolta PageWorks/Pro 20 Printer Driver** onto the server before the driver can be downloaded to the client.
- The following installation procedure is not possible if you are installing the driver on an operating system other than Windows NT4.0.

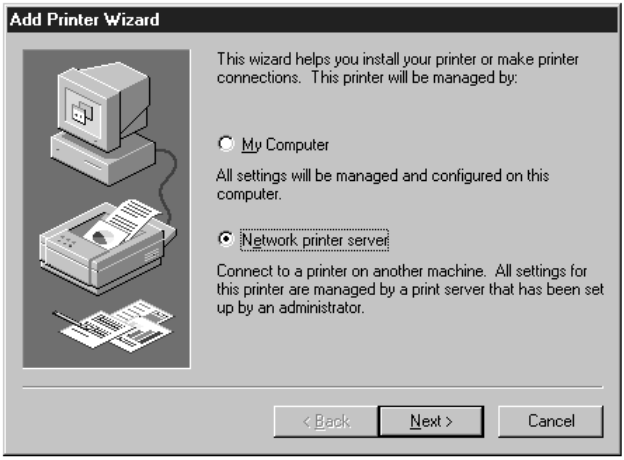
1 Turn on your printer.

2 Turn on your computer and start up Windows NT4.0

3 Click the **Start** button, point to **Settings** and then click **Printers**.

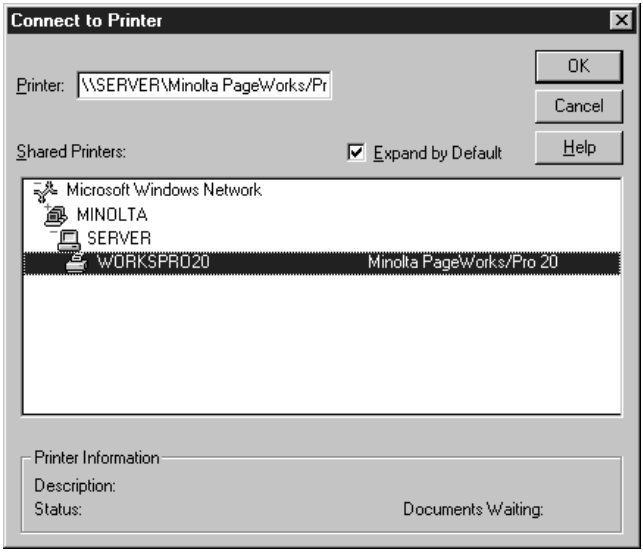
4 Click on the **Add Printer** icon.

5 Select **Network printer server** and click the **Next >** button.

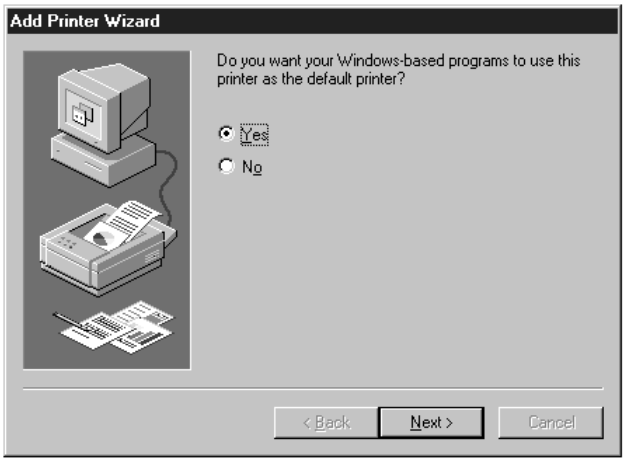

Add Printer Wizard
This wizard helps you install your printer or make printer connections. This printer will be managed by:
My Computer
All settings will be managed and configured on this computer.
Network printer server
Connect to a printer on another machine. All settings for this printer are managed by a print server that has been set up by an administrator.
< Back
Next >
Cancel

6 Select the name of the network print server that you will connect to from the **Shared Printers** list.

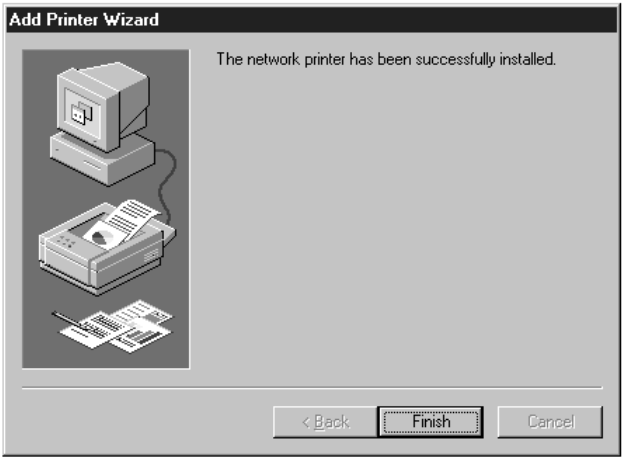
7 Choose a printer name from the list of printers that are connected to the server and click the **OK** button.



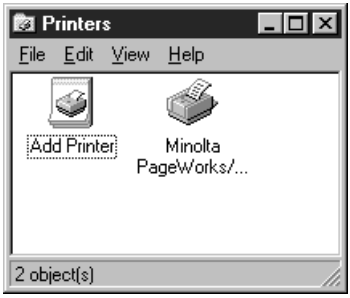
8 Select the printer to be used as the default printer and click the **Next >** button.



9 Click the **Finish** button.



10 Click the **Start** button, point to **Settings** and then click **Printers**. Make sure that the **Minolta PageWorks/Pro 20** network printer icon appears in the **Printers** window.



Chapter 2

Using the Printer Driver

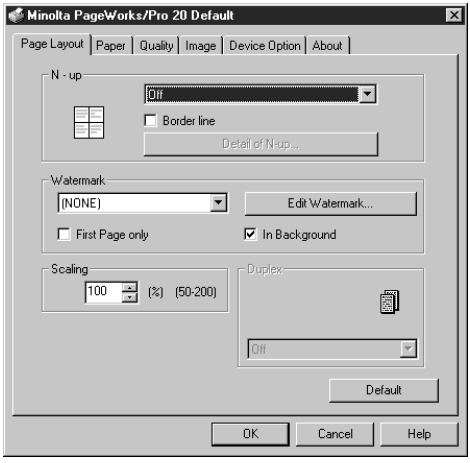
Printer Software Overview

This printer software allows you to configure your printer for optimal performance. The printing quality of your documents will be determined by the settings of your application software, the original data (resolution, data format), and the quality of the paper that you use.

Displaying the PageWorks/Pro 20 Printer Driver Window

1 Click the **Start** button, **Settings**, and then **Printers** to display the **Printers** dialog box.

2 Select the **Minolta PageWorks/Pro 20** software icon by clicking on it with the mouse pointer. Next, open the file menu and click on the **Document Defaults…** item.



Tabs

You can move between the six main screens of the printer software by clicking on the tabs along the top of the window. Through these screens, you can control the operation and features of your printer as well as makes changes to its settings. The following sections of this manual describe in detail how to do this.

Exiting the PageWorks/Pro 20 Printer Driver

You can exit the printer application by clicking the **OK** or **Cancel** button at the bottom of any of the application's five main screens or by clicking the window close button (**X**) in the upper-right corner of the window.

Choosing Menu Settings

The following standard Windows procedures can be used when making settings in the printer software's menu pages.

- Clicking an option button or name
- Clicking a check box
- Dragging the scroll box on a scroll bar
- Clicking a drop-down list box and then clicking on an item to select it

For details, refer to your user's documentation for operating Windows NT.

Common Button Operations

OK

Click this button to close the printer software window and send or save all of the setting changes that you made.

Cancel

Click this button to close the printer software window without saving or sending any of the setting changes that you made.

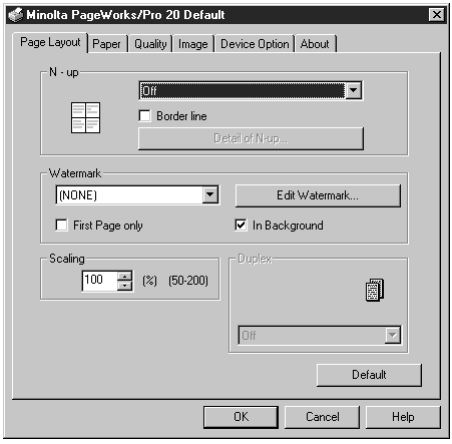
Help

Click this button to display detailed information about the tab that is currently open.

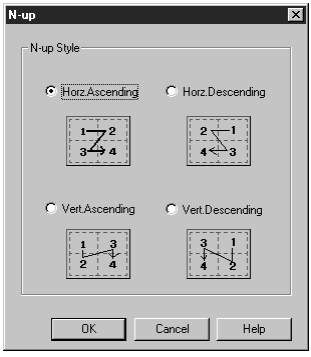
Software Settings

This section describes all of the setting options available through this software.

Page Layout

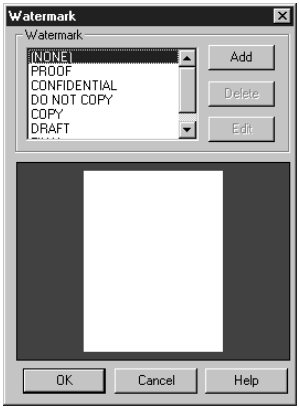


N-up



This feature allows you to print two (2-Up) or four (4-Up) documents on one page. Click the **Detail of N-up…** button to set the ascending or descending order of pages on your N-Up document. The pages can be arranged either horizontally or vertically by clicking on the title of the desired orientation.
To add borders to define your individual documents, click the **Border line** button.

Watermark



Watermarks are useful for alerting the reader to the nature of your document's content (CONFIDENTIAL, URGENT, etc.). When you select to print a watermark, the default setting will shadow the watermark underneath the text of your document. Watermarks will be placed on only the first page of the document when the **First Page only** box is checked. When **In Background** is checked, the watermark is placed behind the text of the document and cannot be seen. When **In Background** is not checked, the watermark is superimposed over the text.

The drop-down list catalogs the watermarks that have been stored. The currently selected watermark is also displayed here. The default setting for this feature is NONE (no watermark). Click the **Edit Watermark…** button to open the **Watermark** window. The contents of the drop-down list are displayed here along with the following command buttons:

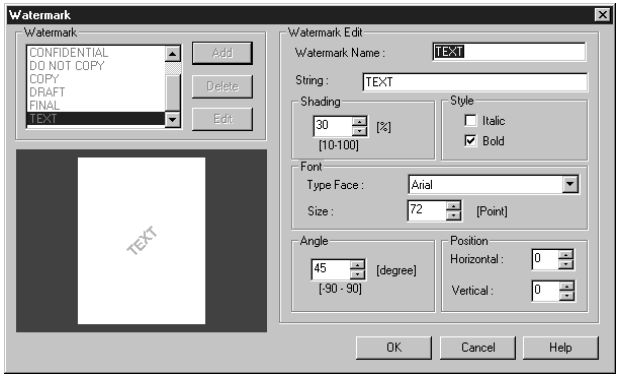
Add Button

Click this button to add a new watermark to the Watermark list.

Delete Button

Click this button to delete a selected watermark from the Watermark list.

Edit Button



Click this button to open the **Watermark Edit** dialog. The following settings are controlled here:

Watermark Name

The name that you wish to use to identify the watermark in the Watermark list is entered here.

String

The contents of the watermark that you wish to create are entered here.

Shading

The depth of gray tones is controlled here.

Style

These settings can be used to specify the style of the watermark's font.

Font

The typeface and the point size of the watermark are specified here.

Angle

Rotate the angle of the watermark's placement through the value specified in this box.

Position

Adjust the vertical and horizontal values to position the watermark on the document.

An example of the selected watermark will automatically appear in the sample window. The sample will simultaneously reflect setting changes to the watermark as you make them.

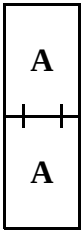
Scaling

Enlarge or reduce a document to be printed using this setting. The maximum that a document to be printed can be enlarged is 200%, or twice its original size. The maximum that a document to be printed can be reduced is 50% of its original size. You can manually type in a value or use the arrow buttons to increase or decrease this setting.

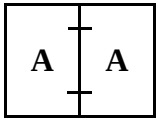
Duplex

The Duplex feature allows you to print on both sides of a sheet of paper as well as determine its binding edge. In order to select a setting from the Duplex drop-down menu of the **Paper tab**, Duplex must first be installed in the **Device Options** tab.

Once Duplex is selected as an installed option, select either **Short Edge Binding** or **Long Edge Binding**.



Short Edge Binding



Long Edge Binding

Short Edge Binding: this setting will print documents in a book style format. The second and third pages of the document will face each other.

Long Edge Binding: this setting will print documents in a calendar style format with the even numbered pages upside down.

Note

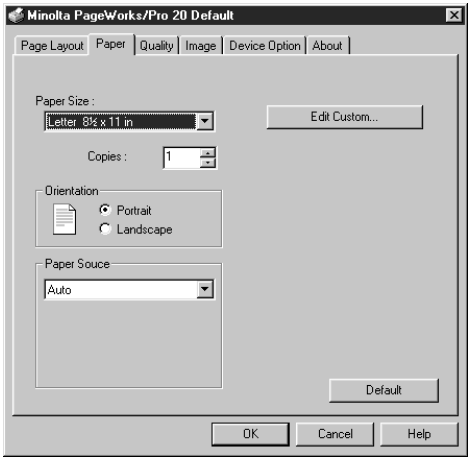
- Printing on both sides of a sheet of paper demands more memory than one-sided printing. An additional 8MB of memory is recommended for optimal performance of this feature.

The factory default for this setting is Off.

Note

- To activate this setting, you must change the Duplex Unit setting in the Device Option dialog box from “Installable Options” to “Installed Options”.
- Do not use special paper (transparencies, labels, envelopes, letterhead or thick paper) for duplex printing.
- Duplex printing is not possible on custom size paper that is smaller than A5.

Paper



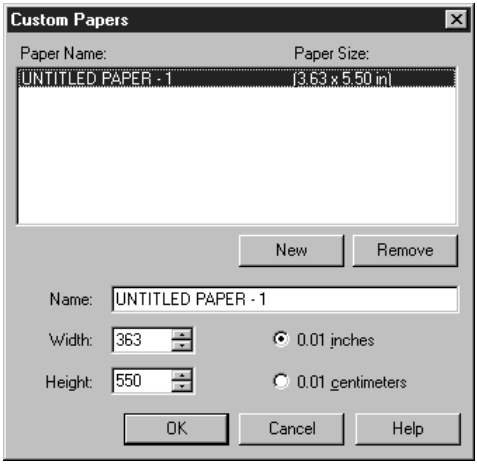
Paper Size

This setting allows you to specify the size of paper or envelope(s) that will be used for printing. Some applications override this setting with their own. The following is a list of available paper sizes:

- **Letter** **8 1/2 × 11 in**
- **Legal** **8 1/2 × 14 in**
- **Ledger** **11 × 17 in**
- **A4** **210 × 297 mm**
- **A3** **297 × 420 mm**
- **A3+** **330 × 483 mm**
- **Executive** **7 1/4 × 10 1/2 in**
- **B4** **250 × 354 mm**
- **JIS B5** **182 × 257 mm**
- **Env. #10** **4 1/8 × 9 1/2 in**
- **Env. DL** **110 × 220 mm**
- **Env. C5** **162 × 229 mm**
- **Env. Monarch** **3 7/8 × 7 1/2 in**
- **Env. B5** **176 × 250 mm**
- **Custom**

To specify a size of paper or envelope for printing from the **Paper Size** list, click on the name of the paper size.

Edit Custom



Click this button to open the **Custom Papers** window. The settings of this window allow you to add or remove paper sizes from the **Paper Size** window.

- **To add a custom paper:**

First, click **New**. Enter the name of the paper that you wish to add in the **Name** line.

Under **Width** and **Height**, enter the dimensions of the paper you are adding.
The possible range for specifying the width of a custom paper is from 363 to 1300 [0.01 inch] or 921 to 3302 [0.01 centimeter].
The possible range for specifying the height of a custom paper is from 550 to 1902 [0.01 inch] or 1397 to 4830 [0.01 centimeter].
Be sure to specify the dimensions by selecting either **inches** or **centimeters**. Click **OK** to return to the **Paper** tab.

The name of the custom paper that you entered in the **Name** line will appear in the **Paper Size** list.

- **To remove a custom paper:**

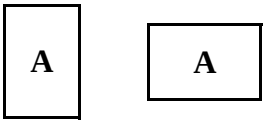
Select the name of the paper size that you wish to remove from the **Paper Name** window and click on the **Remove** button.

Copies

This setting specifies the number of copies of a document that will be output by the printer. You can enter a number from 1 to 999 by typing it into the **Copies** box or by clicking on the up and down scroll buttons. The factory default for this setting is one.

Orientation

This setting determines the direction of the text when it is printed on the page. A **Portrait** oriented page is taller than it is wide when the printed text is viewed upright. A **Landscape** oriented page is wider than it is tall when its text is viewed upright.



Portrait Landscape

The factory default for the Orientation setting is **Portrait**.

Paper Source

The **Paper Source** setting specifies the location of the paper and media to be used for printing to the printer. Click on the arrow button to view the possible options. Optional paper and media sources such as **Tray3** must be added in the **Device Option** tab before they will appear in the **Paper Source** menu.

Depending upon the optional paper sources installed on your printer, the following paper sources are available:

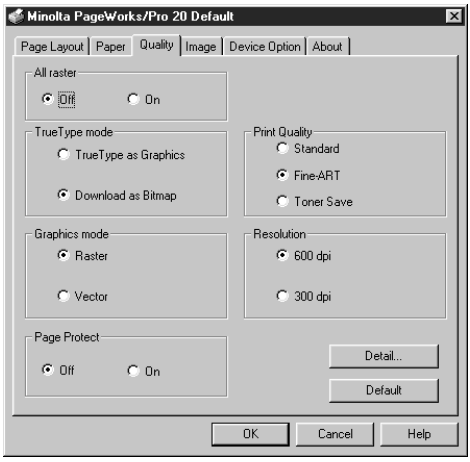
- **Auto**
- **Tray1**
- **Tray2**
- **Tray3**
- **Manual**
- **Manual (transparent)**
- **Manual (thin paper)**

The factory default for this option is **Auto**.

Default Button

Click the default button to restore all setting changes to their original values.

Quality



All raster

When **On** is specified in the **All raster** setting, all data is rasterized before it is sent to the printer.
When **Off** is specified, object data is sent to the printer as bitmaps, TrueType, etc., and the printer rasterizes remaining data as necessary.

TrueType mode

The TrueType mode settings determine how font data is sent from the computer to the printer. Data can either be sent as a **graphic** or a **bitmap**.

When the default **Download as Bitmap** setting is enabled, the printer will output high-speed, high-quality documents for most applications. If you notice a difference between the on-screen and printed document, try the **TrueType as Graphics** setting.

Graphics mode

These settings control the format used to print graphic images.

Vector

The Vector mode handles images as sets of vector objects. Images are downloaded faster in the Vector mode than in Raster mode.

Raster

This setting sends graphic images to the printer as bitmaps. Longer printing time may be noticed when Raster is selected. However, if you notice a difference in the image that appears in the monitor and the image that is generated by the printer, you might try enabling the Raster mode.

Page Protect

This feature enables the printer to start printing only once it has received the data for the entire page. A portion of the printer's memory is reserved to store the data before it is printed, ensuring that the document, its text, its images and layout are completely processed. **Page Protect** should only be set to **On** if you are printing unusually complex documents. The default for this setting is **Off.**

Off

Performance is enhanced when **Page Protect** is set to **Off** for most applications.

On

When **Page Protect** is set to **On**, a portion of the printer's memory will be used to store each document until it has been output by the printer. This mode should only be used if you are printing a high volume of complex documents. To ensure that the **Page Protect** mode is effective in safeguarding your documents, you might install additional memory into your printer.

Print Quality

The three **PrintQuality** settings allow you to adjust the print quality depending upon the nature of the document. The factory default for this setting is **Fine-ART** which will provide high-quality, optimal printing for most text and graphics.

Standard

The **Standard** setting provides a level of quality suited to general-purpose printing.

This setting produces prints at a higher speed than the **Fine-ART** setting and may be preferable when printing large quantities of text-only documents.

Fine-ART

This setting is optimal, especially for documents that contain graphics or complicated layouts. **Fine-ART** generates well-defined text and is optimal when printing high-resolution documents (600dpi).

Toner Save

This option helps to reduce your printing costs by conserving toner during use. This mode is recommended when printing rough drafts or sample documents.

Resolution

The resolution setting determines the **dots per inch** used when a document is printed. Documents printed in higher resolution will be sharper, however they may take longer to print.

600 dpi

This setting supports high-resolution printing.

300 dpi

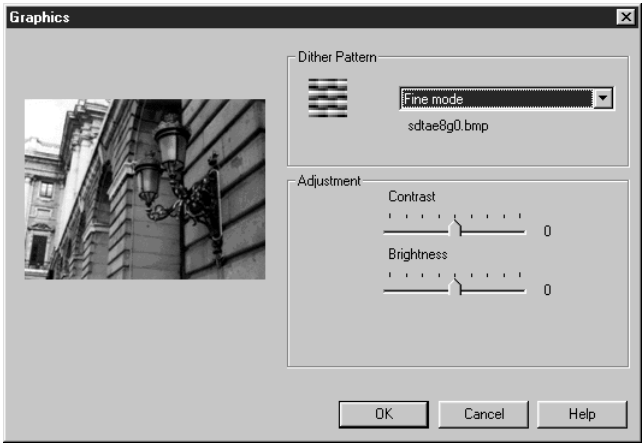
This setting supports standard resolution printing.

Default Button

Click the default button to restore all setting changes to their original values.

Detail Button

Click this button to open the **Graphics** dialog.



This dialog provides tools for fine tuning the clarity and appearance of the printed document. Use the view window to gauge the current settings and to monitor setting changes as you make them.

Dither Pattern

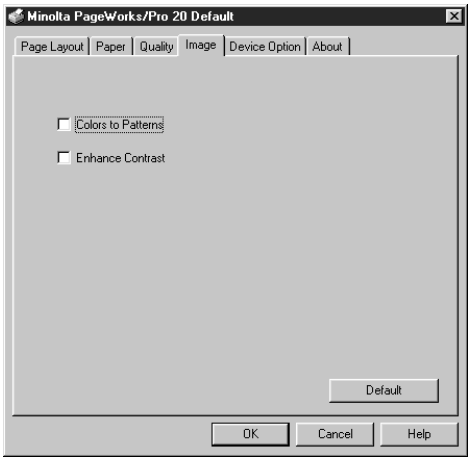
Dithering can be used to improve the texture of graphics. Changing the dither pattern will affect the gray tones and shadowing of an image. Click on the arrow button to open the menu of available **dither patterns**. A sample of the pattern selected will appear. The factory default for this setting is **Fine mode.**

Adjustment

The sliders can be used to control the tones and lighting of an image in terms of **Contrast** and **Brightness**. To fine tune these settings, click and hold on the sliders in order to make left and right adjustments. Value changes are reflected in the view window as you make them.

The factory default setting for both **Contrast** and **Brightness** is 0.

Image



Use these settings to enhance the graphic images that appear in your printed documents.
There are two settings to choose from:

Colors to Patterns

Enabling this setting will print color images as monochrome patterns. This setting is convenient when printing color charts and graphs that will be sent via facsimile.

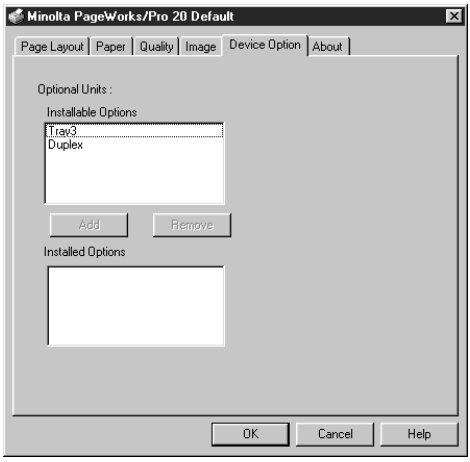
Enhance Contrast

Enabling this setting enhances the contrast of documents that contain subtle tones and shadows.

Default Button

Click the default button to restore all setting changes to their original values.

Device Option



This tab manages the optional accessories and equipment that are either installed or available for installation to your printer.

Installable Options

The auxiliary accessories that are available for installation appear in this window. To add an available option to the **Installed Options** list, select the option by clicking on it and then click **Add**.

Installed Options

The optional accessories that have been added to your printer appear in this window.

Add

Click this button to add a selected option from the **Installable Options** window to the **Installed Options** window.

Remove

Click this button to remove an installed option from the **Installed Options** window.

Notes

- The **Add** button is active only when an option is selected from the **Installable Options** window.
- The **Remove** button is active only when an option is selected from the **Installed Options** window.

About

This tab displays version and copyright information about your printer driver.

Copyright
1998 MINOLTA CO., LTD
Printed in Japan

The information contained in this manual is subject to change without notice to incorporate improvements made on the product or products the manual covers.

Minolta CO., LTD. Image Information Products Marketing Headquarters, 3-13, 2-chome, Azuchi-machi, Chuo-ku, Osaka. 541-8556, Japan
1998. 6
0993-7709-01